



Request for City Council Committee Action from the Office of Emergency Management

Date: November 21, 2012

To: Don Samuels, Chair, Public Safety, Civil Rights and Health Committee

Referral to:

Subject: Chapter 128.40 Annual Report on the Transport of Spent Nuclear Material through the City.

Recommendation: Receive and File.

Previous Directives: Chapter 128.40 requires the Emergency Management Director to issue an annual report in December regarding the transport of spent nuclear fuel through the City.

Department Information

Prepared by: Bill Anderson, Emergency Management Assistant, OEM, 673-5803
Approved by: Barret Lane, Director, Office of Emergency Management
Presenters in Committee: Bill Anderson, OEM

Reviews

- Permanent Review Committee (PRC): Approval ____ Date _____
- Civil Rights Approval Approval ____ Date _____
- Policy Review Group (PRG): Approval ____ Date _____

Financial Impact *(delete all lines not applicable to your request)*

- No financial impact

Community Impact

- Neighborhood Notification No
- City Goals No
- Comprehensive Plan No
- Zoning Code No
- Other

Supporting Information

Chapter 128.40 was passed by the City Council in 1984 to address the issue of the transport of spent nuclear fuel rods from the Monticello Nuclear Power Plant to a storage facility in Morris, Illinois. The intent of 128.40 was to assure that radiological materials were transported as safely as possible within the city, and, if an accident were to happen, that response agencies had the resources to address such an incident.

In the 1980s, Monticello did ship 1,058 spent fuel assemblies to a General Electric storage facility in Illinois. However, in the fall of 2008, Xcel Energy began storing spent fuel on-site at the Monticello Plant. When used fuel is moved from the reactor, it is stored in a pool inside the plant and from there to a dry cask storage facility on-site. Ten canisters, each holding 61 fuel assemblies, were safely transferred to the on-site concrete storage bunkers in the fall of 2008. The next fuel transfer will be an additional 10 canisters in 2013 and 10 more are tentatively scheduled to be loaded and placed on-site in approximately 2016.

All U.S. nuclear power plants store spent nuclear fuel in "spent fuel pools." These pools are robust constructions made of reinforced concrete several feet thick, with steel liners. The water is typically about 40 feet deep, and serves both to shield the radiation and cool the rods. As the pools near capacity, utilities move some of the older spent fuel into "dry cask" storage. Fuel is typically cooled at least 5 years in the pool before transfer to cask. The NRC believes spent fuel pools and dry casks both provide adequate protection of the public health and safety and the environment. NRC regulations do not specify a maximum time for storing spent fuel in pool or cask. The agency's "waste confidence decision" expresses the Commission's confidence that the fuel can be stored safely in either pool or cask for at least 60 years beyond the licensed life of any reactor without significant environmental effects. At current licensing terms (40 years of initial reactor operation plus 20 of extended operation), that would amount to at least 120 years of safe storage.

In the City of Minneapolis, the Minneapolis Fire Department is assigned the responsibility for radiological response under the Minneapolis Emergency Operations Plan (Annex N). MFD Haz Mat has received training on radiological response and additional radiological response training is planned for early 2013. Any incident beyond the ability of the MFD to handle would result in a request to the State Duty Officer and the deployment of state radiological emergency response assets. MPD would also respond to such an incident to provide perimeter control, site security and assist in the event the incident was intentional and a crime scene.

In the preparation of this report, OEM staff consulted with Xcel Energy, the Minnesota Department of Health and Minnesota Division of Homeland Security and Emergency Management. Since the reason for the creation of Chapter 128.40 no longer exists, both State agencies recommend repeal of this provision in 2013.

128.40. - Transportation of radioactive material.

The emergency management director shall transmit, immediately upon the passage of this section and annually thereafter during the month of December, to the mayor and to the city council an assessment of the adequacy of emergency response capability, and the safety of the transportation of radioactive material, as defined, licensed and regulated in 10 CFR part 71 and 49 CFR parts 171—177, through, into, or out of the City of Minneapolis.

The emergency management director shall make such assessment:

- (1) After consultation and coordination with the owner and/or consignee of the material, the transporter of the material, the health, police, and fire departments of the city, and the State of Minnesota;
- (2) After consideration of the requirements of and certifications to other agencies responsible for the regulation of such transportation and the performance capabilities of the equipment to be utilized; and
- (3) After consideration of the method of transportation to be used, the route or routes of travel, timing, and any unique local features of the route or routes involving potential disturbance to the shipment or susceptibility to harm of the locale or persons nearby.

In such transmittal, the assistant city coordinator of regulatory services and emergency preparedness shall delineate the resources available for emergency response, the sources of such resources, the training level of the resources, the rapidity of response from each source, the coordination of the responses as planned, and the plans of other agencies, owner, transporter, and the state to respond to any incident. (84-Or-216, § 1, 11-21-84; 2003-Or-030, § 5, 3-21-03; 2004-Or-060, § 2, 5-28-04)